

## **I. AMENDMENTS**

### **Amendments to the Claims:**

The following listing of claims replaces all prior versions and listings of claims in the application:

Please cancel claims 1 to 15 without prejudice.

16. (Currently amended) A method of highlighting a cell compartment, a biological component or macromolecule in an organism or virus to determine the presence or absence of said cell compartment, biological component or macromolecule comprising:

- (a) providing a chimeric polypeptide to the organism or virus, said chimeric polypeptide including:
  - (i) a first polypeptide region being capable of specifically binding at least one detectable molecule; and
  - (ii) a second polypeptide region being capable of specifically binding the biological component or macromolecule of the organism or virus; or targeting into a specific cell compartment; and
- (b) exposing the organism or virus to said detectable molecule under conditions suitable for binding of said detectable molecule to said first polypeptide region thereby highlighting the cell compartment biological component or macromolecule in the organism or virus and determining the presence or absence of said cell compartment, biological component or macromolecule.

17. (Currently amended) The method of claim 16, wherein the organism is selected from the group consisting of ~~a virus~~, a bacterium, a protozoa, a fungus, a yeast, an algae, a plant and an animal.

18. (Currently amended) The method of claim 16, wherein step (a) is effected by providing a nucleic acid construct encoding said chimeric polypeptide and expressing said chimeric polypeptide within the organism or virus.

19. (Currently amended) The method of claim 16, wherein step (b) is effected by administering said detectable molecule to the organism or virus.

20. (Original) The method of claim 16, further comprising a step of visualizing said detectable molecule.

21. (Original) The method of claim 20, wherein said visualizing is effected using a microscope.

22. (Original) The method of claim 21, wherein said microscope is equipped with a light source.

Please cancel claims 23 to 41 without prejudice.

42. (Previously presented) The method of claim 16, wherein said first polypeptide region comprises a single chain Fv and said second polypeptide region comprises S-AKAP84.

Please add the following claims:

43. (New) The method of claim 16, wherein said cell compartment, biological component or macromolecule is in a virus.

44. (New) A method of highlighting a cell compartment or biological component in an organism or virus comprising:

- (a) providing a chimeric polypeptide to the organism or virus, said chimeric polypeptide including:
  - (i) a first polypeptide region being capable of specifically binding at least one detectable molecule; and
  - (ii) a second polypeptide region being capable of specifically binding the biological component of the organism or virus; or targeting into a specific cell compartment; and
- (b) exposing the organism or virus to said detectable molecule under conditions suitable for binding of said detectable molecule to said first polypeptide region thereby highlighting the cell compartment or biological component in the organism or virus.

45. (New) The method of claim 44, wherein the organism is selected from the group consisting of a bacterium, a protozoa, a fungus, a yeast, an algae, a plant and an animal.

46. (New) The method of claim 44, wherein said cell compartment or biological component is in a virus.

47. (New) The method of claim 44, wherein step (a) is effected by providing a nucleic acid construct encoding said chimeric polypeptide and expressing said chimeric polypeptide within the organism or virus.

48. (New) The method of claim 44, wherein step (b) is effected by administering said detectable molecule to the organism or virus.

49. (New) The method of claim 44, further comprising a step of visualizing said detectable molecule.

50. (New) The method of claim 49, wherein said visualizing is effected using a microscope.

51. (New) The method of claim 50, wherein said microscope is equipped with a light source.

52. (New) A method of highlighting a cell compartment, a biological component or macromolecule in an organism or virus comprising:

- (a) providing a chimeric polypeptide to the organism or virus, said chimeric polypeptide including:
  - (i) a first polypeptide region being capable of specifically binding at least one detectable molecule; and
  - (ii) a second polypeptide region being capable of specifically binding the biological component or macromolecule of the organism or virus; or targeting into a specific cell compartment; and
- (b) exposing the organism or virus to said detectable molecule under conditions suitable for binding of said detectable molecule to said first polypeptide region thereby highlighting the cell compartment or biological component in the organism or virus.

53. (New) The method of claim 52, wherein the organism is selected from the group consisting of a bacterium, a protozoa, a fungus, a yeast, an algae, a plant and an animal.

54. (New) The method of claim 52, wherein said cell compartment or biological component is in a virus.

55. (New) The method of claim 52, wherein step (a) is effected by providing a nucleic acid construct encoding said chimeric polypeptide and expressing said chimeric polypeptide within the organism or virus.

56. (New) The method of claim 52, wherein step (b) is effected by administering said detectable molecule to the organism or virus.

57. (New) The method of claim 52, further comprising a step of visualizing said detectable molecule.

58. (New) The method of claim 57, wherein said visualizing is effected using a microscope.

59. (New) The method of claim 58, wherein said microscope is equipped with a light source.

60. (New) The method of claim 52, wherein said macromolecule is cell specific.

61. (New) The method of claim 52, wherein said detectable molecule is localized.